

1.0 Introduction and Background

1.1 Project Location and Background

Power Resources Inc. (PRI), a wholly owned subsidiary of Cameco US Holdings Inc., doing business as Cameco Resources (Cameco) in the State of Wyoming, submitted a Plan of Operations (PoO) to the Bureau of Land Management (BLM) Lander Field Office (FO) for the proposed Gas Hills In-situ Recovery (ISR) Uranium Project (Gas Hills Project or Project) in central Wyoming. The Gas Hills Project is located in Townships (T) 32 and 33 North (N), Ranges (R) 89 and 90 West (W), 6th Principal Meridian, in an area of historic uranium mining development, the earliest of which dates back to the 1950s (**Figure 1-1**).

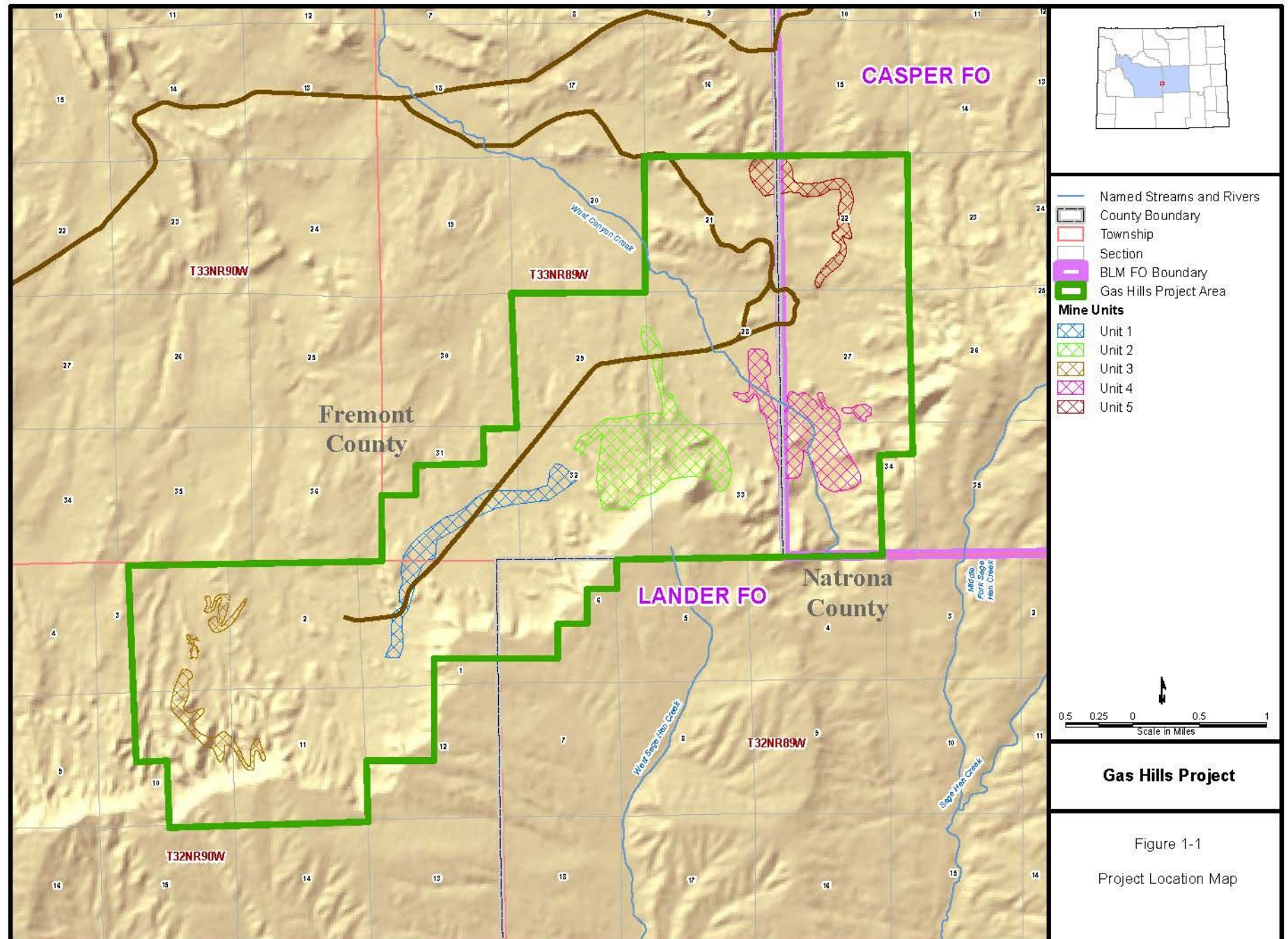
Cameco is a publicly traded company in the business of mining, processing, and selling uranium-based products that are used for fuel in nuclear power facilities. The Gas Hills Project would be operated as a satellite facility to Cameco's existing Smith Ranch-Highland facility located in Converse County, Wyoming.

The Gas Hills Mining District is located near the geographical center of Wyoming, in eastern Fremont and Western Natrona counties approximately 45 road miles east of Riverton, Wyoming, and approximately 65 road miles west of Casper, Wyoming. Uranium was discovered in the Gas Hills Mining District in the early 1950s, and within a few years, thousands of claims were staked and many small open-pit mines were developed in shallow deposits above the water table. By the late 1950s, an ore mill had been constructed in Riverton for processing Gas Hills ore. Deposits below the groundwater table were discovered in the late 1950s, and large-scale surface and underground mining commenced. Production continued through the early 1980s, when a decline in uranium prices forced the closure of area mines and mills. Since then, activity in the Gas Hills Mining District has primarily been associated with mine and mill reclamation, as well as further uranium exploration.

The Gas Hills Project Area (GHPA) is defined by the mine permit boundary and covers approximately 8,500 surface acres (approximately 13 square miles). The GHPA includes mixed surface and mineral ownership as shown in **Table 1-1**. A small portion of lands within the GHPA (approximately 1 percent) are split estate, where the mineral estate is managed by the BLM but the surface is owned by the state or private individuals. While the GHPA contains federal surface and mineral estate under the jurisdiction of both the BLM Lander and the BLM Casper FOs, the Lander FO is serving as the lead office for coordinating the environmental analysis. The Project is permitted by the Wyoming Department of Environmental Quality (WDEQ)-Land Quality Division (LQD) under Permit to Mine No. 687, and is licensed by the United States (U.S.) Nuclear Regulatory Commission (U.S. NRC) under Source Materials License SUA-1548.

Table 1-1 Land Management or Ownership

Management or Ownership	Gas Hills Project Area			
	Surface		Mineral	
	Percent	Acres	Percent	Acres
Federal	94	7,977	94	8,038
State	2	164	6	480
Private	4	377		
Total	100	8,518	100	8,518



1.2 Purpose and Need

National Environmental Policy Act of 1969 (NEPA) includes a requirement to present the purpose and need for the BLM action related to the Project. The purpose and need statement serves as the justification for agency action, as well as establishing the basis for developing a reasonable range of alternatives.

The purpose of the BLM action related to the Gas Hills Project is to respond to Cameco's request for approval of the PoO to extract uranium from existing mining claims initially staked during the 1950s under the General Mining Law of 1872 and since acquired and consolidated by Cameco.

The need for the BLM action is established by the BLM's responsibility under the laws and regulations regarding the availability of all locatable minerals on federal lands, including uranium, as specified under General Mining Law of 1872 as amended (30 U.S. Codes [USCs] §§ 22-54 and §§ 611-615), the original public land authority in 43 USC §§ 2, 15, 1201, and 1457, Title 43 of the Code of Federal Regulations (CFR) in Groups 3700 and 3800, and the Federal Land Policy and Management Act of 1976 (FLPMA) (43 USC 1701 et seq.). Under these laws, the BLM has the obligation to allow and encourage claim holders to develop their claims, subject to restrictions to ensure this development will not cause undue or unnecessary degradation of public lands. ***Where undue or unnecessary degradation is not anticipated, BLM may give substantial weight to Cameco's goals and objectives, which are to extract uranium for profit.***

1.3 BLM Decisions to be Made

The decisions to be made by the BLM-Authorized Officer (AO) are whether to:

1. Approve Cameco's PoO and associated plans relating to ISR mining of uranium on public lands managed by the BLM;
2. Approve Cameco's PoO and associated plans relating to ISR mining on public lands managed by the BLM with changes or conditions to prevent undue or unnecessary degradation to public lands, and to meet standards of 43 CFR 3809.420; or
3. Disapprove Cameco's PoO and associated plans.

1.4 Legal and Policy Considerations

1.4.1 Mining Claims and History

Mining claims associated with the Gas Hills Project initially were staked by multiple small operators and companies during the 1950s. Most of the claims were consolidated under Federal American Partners in the 1970s through partnerships between the following companies; Gas Hills Uranium, Federal Resources, and Radorock Uranium. The Federal American Partners and Tennessee Valley Authority (TVA) joined a partnership in the 1970s, when both underground and open-pit mines were developed. The final consolidation occurred in the early 1980s when TVA obtained Western Nuclear's East Gas Hills properties. Cameco purchased the properties from TVA in multiple agreements between 1991 and 1996, and is currently the sole owner of the claims for the Gas Hills Project.

1.4.2 Conformance with Federal Management Plans and Policies

The BLM has the responsibility and authority to manage the publically held surface and subsurface resources located within the jurisdiction of the Lander and Casper FOs. The Lander FO has taken the lead role for the development of the Gas Hills Project Environmental Impact Statement (EIS), but the Project must conform with the Resource Management Plan (RMP) for each office.

Policies for development and land use decisions for federal lands and minerals for the Gas Hills Project are contained in the following federal documents:

- Record of Decision (ROD) and Approved Casper RMP (BLM 2007a);
- ROD for the Lander RMP (BLM 1987). All alternatives in this EIS were compared to both the existing management as described in the 1987 ROD, as well as to proposed management described under the alternatives in the **Lander Proposed** RMP and **Final** EIS (BLM 2013) to determine that this decision did not preclude the selection of the proposed RMP alternatives. **The ROD and Approved RMP is pending; and**
- General Mining Law of 1872, as amended (30 USC §§ 22-54 and §§ 611-615), as amended.

Additional guidance for the GHPA is contained in the following documents:

- Revised PoO, Gas Hills Uranium ISR Project (PRI 2011a);
- ADAMS Accession Numbers ML040070538 and ML040070311. Environmental Assessment (**EA**) for the Operation of the Gas Hills Project Satellite In-situ Leach Uranium Recovery Facility U.S. NRC 2004);
- U.S. Department of the Interior (USDOI)-BLM-WY-060-EA10-111 **EA** for Cameco Resources/Power Resources Incorporated Reynolds Ranch In-situ Uranium Recovery Project, Converse County, Wyoming (BLM 2011a);
- ADAMS Accession Number ML104330120. EIS for the Nichols Ranch ISR Project in Campbell and Johnson counties, Wyoming. Supplement to the Generic EIS for In-situ Leach Uranium Milling Facilities (U.S. NRC 2011a);
- 10 CFR Part 71 (U.S. NRC) and 49 CFR Part 173.389 (U.S. Department of Transportation [USDOT]). Transportation of radioactive material in accordance with U.S. NRC regulation, and transport of all byproduct material for offsite disposal in accordance with USDOT in addition to U.S. NRC regulations;
- Surface Operating Standards and Guidelines for Oil and Gas Exploration and Development. Fourth Edition. BLM/WO/ST-06/021+3071/REV 07 (USDOI and **U.S. Department of Agriculture [USDA]** 2007);
- State of Wyoming Executive Order (EO) 2011-5 Greater Sage-Grouse Core Area Protection (Wyoming Office of the Governor 2011); and
- Title 42, **USC**, Section 7901 Uranium Mill Tailings Radiation Control Act of 1978 (UMTRCA).

Management objectives within the Lander RMP ROD and Casper RMP ROD include allowing locatable mineral exploration and development in the Gas Hills region, while protecting or mitigating impacts to other resource values. As such, the Gas Hills Project is consistent with the management decisions contained in the RMPs.

The U.S. NRC, established under the Energy Reorganization Act of 1974, Atomic Energy Act of 1954 (AEA), as amended by UMTRCA, is authorized to issue licenses for the possession and use of source material and byproduct material. These statutes require that U.S. NRC ensure source material, as defined in AEA Section 11(z) and byproduct material, as defined in AEA Section 11e(2) is managed to conform with applicable regulatory requirements. Uranium ISR is regulated by the U.S. NRC pursuant to the requirements of 10 CFR Part 40, "Domestic Licensing of Source Material," and Cameco must obtain approval from U.S. NRC to conduct uranium recovery activities in the Gas Hills.

In 1998, Cameco, operating as PRI submitted an application to the U.S. NRC that requested an amendment to Source Material License SUA-1511 for the Highland Uranium Project, which would allow the operation of a satellite ISR uranium recovery facility at the Gas Hills Project site. With the combination of the **adjacent** Smith Ranch **and** Highland **facilities into a single operation**, the previous

request became a request to amend the newly combined Smith Ranch-Highland facility license (SUA-1548). In January, 2004, U.S. NRC completed an EA *for, and approved the amendment* of Cameco's license SUA-1548 (U.S. NRC 2004) *to include operation of the Gas Hills Project as a satellite to the Smith-Ranch Highland facility.*

While the BLM was a cooperating agency in the development of the U.S. NRC EA, the environmental analysis *was designed to meet that agency's needs. The U.S. NRC's mission is to license and regulate the Nation's civilian use of radioactive materials to protect public health and safety, promote the common defense and security, and protect the environment. The U.S. NRC EA did not address impacts to all resources the BLM, with a mission to sustain the health and productivity of the public lands for the use of present and future generations,* must consider to make a decision. In particular, surface disturbance was not addressed in sufficient detail for BLM's NEPA review purposes. Moreover, the U.S. NRC EA pre-dated the determination by the U.S. Fish and Wildlife Service (USFWS) that listing the greater sage-grouse as a threatened or endangered species was warranted but precluded by workload. The BLM policy directs that an EIS normally should be prepared for mining projects anticipated to result in surface disturbance greater than 640 acres. For these reasons, the BLM determined that the U.S. NRC EA did not provide the level of environmental analysis required to meet the BLM guidance for public lands, and further environmental analysis, including the development of an EIS, would be necessary.

1.4.3 Conformance with Local Land Management Plans and Policies

The State of Wyoming is a cooperating agency on this EIS. There are no comprehensive State of Wyoming plans for the GHPA. Through the Office of the Governor, protections associated with Project components that fall under the jurisdiction of individual state agencies have been identified and included in Project alternatives discussed in this document.

The Project is located in both Fremont and Natrona counties. Fremont County has developed the Fremont County Wyoming Land Use Plan (Fremont County Natural Resources Planning Committee 2004), which is "intended to be a guide for the citizens of Fremont County in identifying and respecting the customs, culture, economic viability, social stability and quality of life found in this unique area, and then applying those values to growth and development as they occur in the county." The Fremont County plan recognizes the influence the mineral industry has on area values, and includes provisions for encouraging and supporting economically feasible mineral development. As a cooperating agency, Fremont County has been involved in the development of Project alternatives described in this document. Because the Gas Hills Project would both supply income from royalties and meet Fremont County concerns, the Proposed Action is consistent with Fremont County planning objectives.

Natrona County has developed the Natrona County Development Plan (Land Use Task Force 1998), which includes discussion of the use and development of public lands within the County. The Natrona County plan emphasizes multiple use to provide encouragement for the traditional uses of ranching, agricultural, and mineral development in rural areas, as well as to encourage a balanced and sustainable multiple use of public lands and resources in Natrona County. The Proposed Action is consistent with the Natrona County Development Plan.

1.4.4 Authorizing Actions and Project Relationships to Statutes and Regulations

The BLM authority for land management is derived from the FLPMA. General BLM regulations are described in 43 CFR, Subtitle B – Regulations Relating to Public Lands, Chapter II – BLM, USDO. The BLM regulations for the management of mining are included in 43 CFR Subpart 3809, Surface Management, and derive their mandate from Sections 302 and 303 of the FLPMA. Subpart 3809 establishes procedures and standards for mining claimants to prevent public land degradation and requires reclamation of disturbed areas. It also requires coordination with state agencies. Under 43 CFR 3809 surface management regulations, surface activity for the Project is more than casual use (includes use of mechanized equipment), and therefore requires a PoO, a full environmental assessment, and

reclamation bonding. ***The reclamation bond ensures that surface reclamation and groundwater restoration would occur.***

The management of use and occupancy of public lands for the development of locatable minerals is described in the provisions of 43 CFR 3715. The BLM will make a determination as to whether or not the construction, presence, or maintenance of the temporary or permanent structures described in the PoO meet the requirements of the 43 CFR 3715 regulations.

The General Mining Law of 1872 declared all valuable mineral deposits in land belonging to the U.S. to be free and open to exploration and purchase. Under FLPMA, these actions require recordation of mining claims with the BLM and authorized regulations for surface protection of the public lands. The Mining and Mineral Policy Act of 1970 mandates that federal agencies ensure that closure and reclamation of mine operations be completed in an environmentally responsible manner. The Mining and Mineral Policy Act of 1970 states that the federal government should promote the “development of methods for the disposal, control, and reclamation of mineral waste products, and the reclamation of mined lands, so as to lessen any adverse impact of mineral extraction and processing upon the physical environment that may result from mining or mineral activities.”

In Wyoming the BLM coordinates review of surface management PoO, bonding, and inspections with the WDEQ-LQD under a Memorandum of Understanding (MOU) established in 1975 and supplemented in 2003 (MOU No. WY 19). In accordance with the MOU, the bond amount is established by the WDEQ-LQD and the BLM reviews the bond for adequacy and responds with concurrence or recommendations for modification. ***In addition, the U.S. NRC is involved with reclamation bond surety approval.*** Inspections are conducted jointly when possible and primary responsibility is given to the WDEQ-LQD for Regular and Small Mining Operations. Also, as part of the MOU the BLM and WDEQ-LQD agree that the operator shall be responsible for providing updated reclamation bond estimates annually. The current bond amount held for the Project is equal to \$3,473,800.00. The bond amount will be reviewed by the BLM in accordance with the provisions of 43 CFR 3809.552, and the BLM will periodically review the estimated cost of reclamation and require increased coverage if necessary.

Other major federal, state, and local regulations and permits that are relevant to the Proposed Action include, but are not limited to, those listed in **Table 1-2**.

Table 1-2 Major Federal and State Laws, Regulations, and Applicable Permits

Issuing Agency	Name and Nature of Permit/Approval	Regulatory Authority (if appropriate)
Federal Agencies		
BLM	BLM, as lead federal agency, to review, provide input, and approve the PoO, and issue a ROD.	NEPA (Public Law [P.L.] 91-190), Council on Environmental Quality (CEQ) – Regulations for Implementing NEPA (40 CFR Parts 1500-1508), and USDO Implementation of NEPA; Final Rule (43 CFR Part 46).
	BLM to authorize ISR mining operations based on submitted PoO.	General Mining Law of 1872, as amended (30 USC §§ 22-54 and §§ 611-615), as amended, and implementing regulations (43 CFR Group 3700 and 3800).
		Portions of FLPMA 43 USC §§ 1701-1782, as amended that affect the General Mining Law.

Table 1-2 Major Federal and State Laws, Regulations, and Applicable Permits

Issuing Agency	Name and Nature of Permit/Approval	Regulatory Authority (if appropriate)
BLM (Cont.)	Antiquities and cultural resource permits on BLM-administered land.	Antiquities Act of 1906, as amended (16 USC 431-433). Archaeological Resources Protection Act (ARPA) of 1979, as amended (16 USC 470aa-47011). Preservation of American Antiquities, as amended (43 CFR 3). National Historic Preservation Act of 1966, as amended (NHPA) (16 USC 470) (36 CFR Part 80).
	Evaluate Environmental Justice.	EO 12898, Environmental Justice. February 11, 1994.
	Pesticide Use Permit and Daily Pesticide Application Record.	BLM Authorization for Herbicide Applications on Federal Lands.
	Federal Noxious Weed Act compliance.	Plant Protection Act of 2000 (P.L. 106-224, 7 USC 7701); Federal Noxious Weed Act of 1974, as amended (USC 2801-2814); EO 13112 of February 3, 1999.
	Initiation of Section 7 consultation.	Section 7 of the Endangered Species Act of 1973, as amended (ESA) (16 USC et seq.).
	Paleontological Resource Use Permit; approval for surveys and potential data collection at well pads and road sites.	FLPMA (302[b]).
	Identify and comply with Native American Religious Concerns.	American Indian Religious Freedom Act of 1978 (AIRFA) (42 USC 1996).
U.S. NRC	U.S. NRC Source Material License(s) and Radioactive By-Products Material License.	Requirements under Title 10 CFR Part 40 (Domestic Licensing of Source Material), and the guidance in U.S. NRC NUREG-1569, (Standard Review Plan for In-Situ Leach Uranium Extraction License Applications), and Title 10 CFR, Part 51 (Environmental Protection Regulations for Domestic Licensing and Related Regulatory Functions).
	Approval of deep injection of wastewater.	Requirements under Title 10 CFR 20.2002 (Method for obtaining approval of proposed disposal procedures).^a
U.S. Environmental Protection Agency (USEPA)	Standards for Radon Emissions from Operating Uranium Mill Tailings Facilities.	National Emission Standards for Hazardous Air Pollutants (40 CFR 61 Subpart A and Subpart W)^b Note: USEPA has formed a workgroup to review and possibly revise this standard.
USFWS	Informal or formal consultation under Section 7; Coordination under Section 9.	ESA (P.L. 93-205).

Table 1-2 Major Federal and State Laws, Regulations, and Applicable Permits

Issuing Agency	Name and Nature of Permit/Approval	Regulatory Authority (if appropriate)
USFWS (Cont.)	Protection of birds that live, reproduce, or migrate within or across international borders.	Migratory Bird Treaty Act (MBTA) of 1918, as amended; Bald and Golden Eagle Protection Act of 1940.
	Protection of bald and golden eagles.	Bald and Golden Eagle Protection Act of 1940, as amended (16 USC 668(a); 50 CFR 22).
State Agencies		
WDEQ- Water Quality Division (WQD)	Permit for evaporation ponds ^a ; permit for industrial water well.	WDEQ, Water Quality Rules and Regulations Chapter 3, Regulations for Permit to Construct, Install or Modify Public Water Supplies, Wastewater Facilities and Other Facilities Capable of Causing or Contributing to Pollution.
	Underground Injection Control (UIC) permit for Class I disposal wells and potential aquifer exemption. USEPA concurrence and/or program revision.	40CFR Parts 144, 145, and 146. WDEQ–WQD rules, Chapters 8 and 13. An aquifer exemption request for an aquifer containing less than 3,000 milligrams per liter (mg/L) of total dissolved solids would require the aquifer exemption request to be processed as a program revision pursuant to 40 CFR 145.32. An aquifer exemption request for an aquifer containing a concentration of 3,000 to 10,000 mg/L total dissolved solids (TDS) pursuant to Chapter 13, Wyoming Water Quality Rules.
	Wyoming Pollutant Discharge Elimination System (WYPDES) General Permit for Storm Water Discharges from Construction Activities. Temporary discharge of water from groundwater well pump testing and development.	WDEQ, Water Quality Rules and Regulations Chapter 2, Permit Regulations for Discharges to Wyoming Surface Waters.
	WYPDES Industrial Storm Water Permit.	
WDEQ-LQD	Concurrence with USEPA on an Aquifer Exemption for in-situ mining.	WDEQ, Chapter 11, Section 10 Land Quality Non-Coal Rules and Regulations.
	Noncoal Mine Environmental Protection Performance Standards.	WDEQ, Chapter 3, Land Quality Non-Coal Rules and Regulations.
	Permit under UIC rules to conduct mining using Class III wells and aquifer exemption. USEPA concurrence.	40 CFR Parts 144 and 146. WDEQ-LQD rules, Chapter 11, Non-Coal Rules and Regulations.

Table 1-2 Major Federal and State Laws, Regulations, and Applicable Permits

Issuing Agency	Name and Nature of Permit/Approval	Regulatory Authority (if appropriate)
WDEQ-Air Quality Division (AQD)	Air Quality Permit to Construct Air Quality Permit to Operate. <i>Permitting requirements under WDEQ-AQD Standards and Regulations, Chapter 6.</i>	Wyoming Environmental Quality Act, Article 2, Air Quality, as amended (Wyoming Statutes 35-11-201 through 35-11-212).
	Prevention of Significant Deterioration (PSD) Program. National Emission Standards for Hazardous Pollutants Pre-Construction Approval.	Clean Air Act (CAA), as amended (42 USC 7401 et seq.).
Wyoming Game and Fish Department (WGFD)	Determine compliance through external review for greater sage-grouse core areas and management recommendations.	Wyoming EO 2011-05.
	Consult on mitigation measures as required, including protection of raptors from power lines.	In-Situ Mining Permit Application Requirements Handbook §35-11-103(e).
<i>Wyoming Office of State Lands and Investments (WOSLI)</i>	<i>Traversing State Lands off established roads or through construction of a new right-of-way (ROW).</i> <i>Update Uranium Lease b-15211, expired December 1, 2013.</i>	<i>WOSLI General Provisions (Wyoming Statutes 36-2-107 and 36-9-118).</i>
	<i>Compliance with Greater Sage-Grouse Core Area Protection.</i>	<i>Governor's EO 2011-5.</i>
State Historic Preservation Office (SHPO)	Review and compliance activities related to cultural resources.	Consultation under Section 106, NHPA (36 CFR Part 80).
Wyoming Department of Transportation (WYDOT)	Permits for oversize, over length, and overweight loads.	Chapters 17 and 20 of the Wyoming Highway Department Rules and Regulations.
Local Agencies		
Fremont County Planning and Rural Addressing Department	Building permit for all new small wastewater (septic) systems that generate less than 2,000 gallons per day of sewage.	Fremont County Zoning and Building Codes.

^a U.S. NRC's role related to deep disposal of wastewater relates to verifying that the disposal method limits radiological doses to members of the public to as low as reasonably achievable.

^b According to the USEPA, the Proposed Project must comply with the requirements of 40 CFR Part 61 Subpart A and Subpart W.

1.5 Public Participation

1.5.1 Public Participation and Scoping Summary

The Notice of Intent (NOI) for the Gas Hills Uranium ISR Project was published in the *Federal Register* on September 7, 2010, and included a project description and the BLM contact information. In addition to the NOI, the BLM mailed 312 Dear Interested Party letters on October 18, 2010, notifying the public about the Project, the intent to prepare an EIS, and providing information about the scoping meetings. Display advertisements were placed in local newspapers (**Table 1-3**) providing information about the public scoping meeting dates, times, and locations.

Table 1-3 Newspaper Publications

Newspaper	Dates Published
<i>Casper Star Tribune</i>	10/24/2010
<i>Riverton Daily Ranger</i>	10/26/2010, 11/16/2010
<i>Lander Journal</i>	10/24/2010, 10/27/2010, 11/14/2010
<i>Wind River News</i>	10/21/2010, 11/11/2010

Additionally, the BLM issued press releases announcing the intent to prepare an EIS and information about the upcoming public scoping meetings. A press release was issued on September 8, 2010, announcing the BLM's intent to prepare an EIS; on October 13, 2010, announcing the public scoping meetings in Casper, Riverton, and Lander, Wyoming; and a final press release was issued on November 8, 2010, announcing an additional public scoping meeting in Jeffrey City, Wyoming.

Initially, the BLM hosted 3 public scoping meetings in Casper, Riverton, and Lander, Wyoming. At the request of Fremont County Commissioners, a 4th public scoping meeting was held in Jeffrey City, Wyoming. The date, times, location, and number of attendees at the scoping meetings are provided in **Table 1-4**.

Table 1-4 Scoping Meetings

Meeting Location	Meeting Date/Time	Number of Attendees that Signed In
Natrona County Public Library Casper, Wyoming	October 26, 2010 4:00 pm – 6:00 pm	32
Fremont County Library Riverton Branch Riverton, Wyoming	October 27, 2010 4:00 pm – 6:00 pm	38
Fremont County Library Lander Branch Lander, Wyoming	October 28, 2010 4:00 pm – 6:00 pm	28
Jeffrey City Fire House Jeffrey City, Wyoming	November 18, 2010 4:00 pm – 6:00 pm	16

The scoping meetings were conducted using an open house format. The informal open house format allows meeting attendees the opportunity to ask the BLM representatives, the Project applicant, and the NEPA contractor questions about the Project and the NEPA process. Display boards showing the NEPA process and maps of the Project were provided to facilitate conversation. Fact sheets were distributed to meeting attendees describing the Project, the NEPA process, and how the public can be involved. Comment forms were available for the public to complete and submit to the BLM at the meeting, or for mailing to the BLM at a later date. The scoping period closed December 15, 2010.

More details on the public scoping process, meetings, and the comments submitted can be found in the “Gas Hills Uranium EIS Scoping Summary Report” dated February 2011, which was posted to the Project website hosted by the BLM (<http://www.blm.gov/wy/st/en/info/NEPA/documents/lfo/gashills.html>).

1.5.1.1 Primary Issues from Public Scoping

The BLM received a total of 21 comment submittals (e.g., letter or comment form) containing 215 individual comments during the public scoping period. Following the close of the public scoping period, comments were compiled and analyzed to identify issues and concerns. Each comment was identified, reviewed, and entered into an electronic database. As comments were entered, contact information for the commenter was added to or updated in the mailing list to ensure that all interested parties would receive information throughout the EIS process.

Information gained during scoping assisted the BLM in identifying the potential environmental issues, alternatives, and mitigation measures associated with development of the Project. The process provides a mechanism for narrowing the scope of issues so that analysis in the EIS can focus on areas of high interest and concern. A majority of the comments were related to cumulative impacts, mitigation and monitoring, and potential impacts to range resources, water resources, and wildlife resources. There were a number of concerns and questions about the NEPA process and requests for additional public participation. Some of the comments were assigned to more than one category, so they were counted more than once in the table of comments. The following list summarizes submitted concerns by topic category.

- *Alternatives.* Aspects of the Project that should be considered in discussions of alternatives include: phasing; reclamation, and restoration criteria and timing; transportation routes; and wastewater treatment, storage, and disposal.
- *Mitigation and Monitoring.* Previous mining activities in the area have contributed to unreclaimed or poorly reclaimed surface disturbance. Surface reclamation in the area could be problematic. Groundwater restoration could be difficult, and the EIS should examine potential groundwater restoration issues; the timing, inspection, and enforcement of reclamation or restoration needs better definition, and appropriate bonding needs to be required.
- *Rangeland Resources.* The EIS should disclose potential impacts to area recreation, including hunting. Current land use includes grazing, and the EIS should discuss both impacts of grazing to the existing vegetation and impacts to grazing and to grazing permit holders from the Project.
- *Water Resources.* Concerns included potential impacts to both surface water and groundwater. Potential impacts to surface waters to be addressed include river sedimentation from runoff and erosion, protection of existing reclaimed water bodies or impoundments, and the potential for selenium to become concentrated in evaporation ponds. Potential impacts to groundwater to be addressed include contamination of groundwater and aquifers and methods for maintaining the hydraulic cone of depression in case of a temporary shutdown (power interruption). The potential for drawdown due to the mining process to impact area streams and springs, including reducing flows and causing contamination through communication of mine water also should be addressed.

- *Wildlife Resources.* Changes in vegetation due to the Project could impact wildlife, including sage-grouse, mule deer, and antelope. Issues relating to proposed evaporation ponds such as exposure pathways to wildlife, including migratory birds, through drinking water exposure also are of concern. A full description of mitigation for impacts to wildlife should be included, particularly for migratory birds. The Project needs to adhere to the MBTA. The potential for wildlife mortality due to Project-related traffic also should be analyzed.
- *NEPA Process and Public Participation.* The public desired assurance of a complete analysis of impacts. There were concerns that the length of the scoping comment period was insufficient and that information associated with the Project was not readily available (e.g., that Project documents were sufficiently available, whether the public had opportunity for site visits and to attend Cooperating Agency meetings).
- *Cumulative Impacts.* A description of any monitoring that will be incorporated or has been performed to determine area air quality should be included in the analysis description. Impact analysis should include a description of impacts from other uranium projects and non-mining projects in the region. Additionally, short- and long-term impacts to surface water and groundwater and impacts to livestock grazing due to multiple area projects should be discussed.

1.5.2 Public Comments on the Draft EIS

The Notice of Availability for the Draft EIS was published in the Federal Register on November 16, 2012. The BLM mailed postcards or documents notifying the public of the availability of the Draft EIS on the BLM website to 409 interested parties, including federal, state, and local officials and agencies; special interest groups; area libraries and newspapers; and individuals and affected permittees. Open house style public meetings were held in Riverton, Wyoming and Lander, Wyoming on December 4 and 5, 2012, respectively. A 45-day comment period following the notice in the Federal Register was scheduled to end on December 31, 2012; however, due to requests from the public, the BLM extended the comment period to January 31, 2013. The BLM received comments on the Draft EIS from a total of 22 parties.

As required by NEPA, the BLM identified all substantive public comments from the Draft EIS and developed formal responses to each. In accordance with CEQ regulations, substantive comments include those that question 1 or more of the following:

- ***Purpose and need statement;***
- ***Adequacy of the range of alternatives;***
- ***Baseline information;***
- ***Adequacy or accuracy of the analysis;***
- ***Methodologies used to determine impacts; and/or***
- ***Compliance with legal and administrative procedures.***

To identify and evaluate substantive comments, a systematic process was used to ensure all comments were tracked and the content seriously considered.

- 1. Each submission (letter, email, etc.) was carefully reviewed to capture all substantive comments.***
- 2. Each submission that contained 1 or more substantive comment(s) was given a unique letter identifier for tracking purposes.***
- 3. Each comment within a unique submission was assigned a number.***
- 4. Each substantive comment was reviewed by the appropriate resource specialist(s), formal responses were developed, and revisions to the EIS were made as warranted.***

Submissions that were determined to be non-substantive have been included as part of the administrative record. Non-substantive comments generally include statements of opinions, feelings, and/or preferences for 1 alternative over another. Submissions that included comments of a personal and/or philosophical nature were analyzed and considered, but not responded to because such comments are not substantive in nature.

As noted previously, substantive document changes made between the Draft EIS and the Final EIS are shown in bold italics and are indicated by vertical bars that appear in the left margin. These changes were made in response to comments received on the Draft EIS and as a result of updated information that became available after issuance of the Draft EIS.

A complete list of all 22 letters received in response to the Draft EIS, along with their commenter letter identifiers, can be found in Appendix A, Table A-1. The letter identifiers were listed in 1 of 5 categories: F-federal agencies or officials (3 letters), T-tribal agencies or officials (1 letter), S-state agencies or officials (9 letters), L-local (county or municipal) agencies or officials (1 letter), N-non-governmental organizations (1 letter), and P-private individuals or industries (7 letters).

A total of 22 parties submitted comment letters on the Draft EIS. These letters are listed in Table 1-5 along with the affiliation and name of the commenters, if appropriate. A table of all substantive comments, as well as the BLM's responses to those comments, can be found in Appendix A. Copies of all letters received have been included in the administrative record and can be obtained from the BLM Lander FO upon request.

Table 1-5 Public Comment Letters on the Draft EIS

Letter ID	Author/Affiliation	Number of Comments
F01	U.S. Fish and Wildlife Service	8
F02	U.S. Environmental Protection Agency	18
F03	U.S. Nuclear Regulatory Commission	25
T01	Standing Rock Sioux Tribe	2
S01	Riverton & Lander Workforce Centers	2
S02	Wyoming Department of Transportation	3
S03	Wyoming Office of State Lands and Investments	4
S04	Wyoming Department of Agriculture	3
S05	Wyoming Department of Transportation	4
S06	Wyoming Game and Fish Department	33
S07	Governor State of Wyoming	4
S08	Wyoming Department of Environmental Quality	3
S09	Wyoming Department of Environmental Quality	3
L01	Popo Agie Conservation District	1
N01	Wyoming Outdoor Council	3
P01	Ginger Bennet	2
P02	Jim Gores	4
P03	Jonathan Buscher	10
P04	Personal Information Withheld	9
P05	Ron Smith – Strathmore	6
P06	Jazmyn McDonald	3
P07	Wolford – Cameco Resources	61

1.5.3 Agency Coordination and Consultation

1.5.3.1 Cooperating Agency Participation

The BLM identified state agencies, local governments, tribal governments, and other federal agencies with jurisdiction or special expertise for potentially impacted environmental resources associated with the Gas Hills Project. These agencies were extended the opportunity to become Cooperating Agencies for the development of this document and to be involved in the development of alternatives and mitigation measures presented within this document. Agencies were contacted in early December 2010 to determine their interest in participating as Cooperating Agencies. A list of those agencies and their status as Cooperating Agencies is included in **Table 1-6**.

Cooperating Agencies were consulted throughout the development of this EIS to ensure a comprehensive analysis was performed. Additionally, input on the document was requested from the Cooperating Agencies at specific points during the development of the document, as summarized in **Table 1-7**.

The Cooperating Agency meeting held on March 29, 2011, **to develop alternatives** was open for public observation. Comments provided by members of the public during these meetings, either verbally or in writing, were used to inform the discussions of the Cooperating Agencies in developing the EIS.

1.5.3.2 Native American Consultation

Native American consultation was initiated on May 6, 2011, with notification of the BLM's intent to prepare an EIS for the Gas Hills Project to 14 tribes. The Standing Rock Sioux Tribe and Northern Cheyenne Tribe responded to the letter and indicated their interest in participating in the consultation efforts. The Northern Cheyenne later chose to defer to the local tribes for the remainder of the Project. On May 7, 2012, the BLM sent a second letter informing the tribes of the cultural resources inventories previously and recently conducted within the GHPA. The Standing Rock Sioux Tribe, Crow Nation, and Ute Indian Ute Tribe responded to the letter. From May 16 to June 5, 2012, the BLM conducted follow-up call with the 14 tribes to verify receipt of the May 7 letter and to invite the tribes to participate on a conference call tentatively scheduled for mid-June 2012. In early June 2012, the BLM invited the 14 tribes, plus the Sisseton-Wahpeton Oyate Tribe, to participate on a conference call scheduled for June 13, 2012. Of the 15 tribes, 6 tribes were able to participate on the call. The 6 tribes included Northern Arapaho Tribe, Shoshone-Bannock Tribe, Rosebud Sioux Tribe, Sisseton-Wahpeton Oyate Tribe, Yankton Sioux Tribe, and Standing Rock Sioux Tribe. From September 17 to 21, 2012, the BLM conducted a field tour of the GHPA. A total of 6 tribes participated in the field tour. The 6 tribes included the Northern Arapaho Tribe, Eastern Shoshone Tribe, Crow Nation, Oglala Sioux Tribe, Fort Peck Assiniboine Sioux Tribes, and Sisseton-Wahpeton Oyate Tribe.

The list of tribes notified and which tribes have responded are included in Table 1-8.

Table 1-6 Agencies Invited to be Cooperators

Agency	Name of Contact	Date of Response	Cooperating Agency Status
U.S. Department of Natural Resources (USDA) Conservation Service (NRCS)	Casper Service Center	1/3/2011	Declined
U.S. Department of Energy (DOE)	Carol Borgstrom	-	Declined ^a
Fremont County Commission	Douglas L. Thompson	12/14/2010	Cooperating Agency
Natrona County Commission	Rob Hendry	-	Declined ^a
Natrona County Conservation District	Tom Walters	-	Declined ^a
Nuclear Regulatory Commission ^b	Alan Bjornsen	-	Declined ^a
U.S. Forest Service (USFS)	Ruth Esperance	-	Declined ^a
USEPA	James Hanley	12/3/2010	Cooperating Agency
USFWS	Alex Schubert	12/3/2010	Cooperating Agency
Office of the Wyoming Governor	Steve Furtney, Ryan Lance	12/27/2010	Cooperating Agency
Wyoming Department of Agriculture	Jason Fearneyhough, Michelle MacDonald	-	Cooperating Agency ^c
Department of Revenue, Ad Valorem Tax	Ken Uhrich		
Office of State Lands and Investments	Susan Child	-	Cooperating Agency ^c
State Engineer's Office	Sue Lowry		
State Geological Survey	Alan Verploeg		
State Parks, Historic Sites, and Trails	Dominic Bravo		
State Planning Office	Melissa Hayes		
Travel and Tourism	Vicki Morris		
Water Development Commission	Phil Ogle		
Wyoming Business Council	Roger Bower		
WDEQ	Dan Clark		
WYDOT	Gregg Friedrich		
WGFD	Gwen Booth		
Wyoming Livestock Board	Jim Logan		
Wyoming Oil and Gas Conservation Commission	Thomas Doll, Gary Strong		
Wyoming State Forestry Division	Bill Crasper		

^a No response to the BLM's invitation to become a Cooperating Agency was received; no response was interpreted as declining the invitation.

^b The U.S. NRC previously completed an EA for the Gas Hills Project, and is a signatory on the 2003 Programmatic Agreement (PA) among the Wyoming SHPO, U.S. NRC, BLM, and PRI (dba Cameco), and has further signed the May 2012 PA Amendment making the BLM the lead federal agency for Section 106 consultation.

^c The Office of the Wyoming Governor has accepted the role of Cooperating Agency; involvement of indicated state agencies as cooperating agencies is coordinated through that Office.

Note: Earlier communications with the National Park Service (NPS) indicated no parks would be affected by the Gas Hills Project; therefore, NPS has no jurisdiction and was not asked to become a cooperating agency.

Table 1-7 Cooperating Agency Involvement

Input requested	Time Period	Format
Development of Action Alternatives for Project	November 2010 through May 2011	E-mail, telephone discussions, Alternative meeting held March 29
Review of Preliminary Draft EIS	April through May 2012	E-mail, telephone discussions
Review of Preliminary Final EIS	June through July 2013	E-mail, mail, telephone discussions

Table 1-8 Native American Consultation Summary

Tribe	Response (Y/N)
Ute Indian Tribe	<i>Y</i>
Northern Arapaho Tribe	<i>Y</i>
Eastern Shoshone Tribe	<i>Y</i>
Crow Nation	<i>Y</i>
Northern Cheyenne Tribe	<i>Y</i>
Shoshone-Bannock Tribe	<i>Y</i>
Rosebud Sioux Tribe	<i>Y</i>
Oglala Sioux Tribe	<i>Y</i>
Cheyenne River Sioux Tribe	<i>No response to date</i>
Lower Brule Sioux Tribe	<i>Y</i>
Fort Peck Assiniboine Sioux Tribes	<i>Y</i>
Standing Rock Sioux Tribe	<i>Y</i>
Crow Creek Sioux Tribe	<i>No response to date</i>
Yankton Sioux Tribe	<i>Y</i>
<i>Sisseton-Wahpeton Oyate Tribe</i>	<i>Y</i>